Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE
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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
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<u>Ex parte</u> JAN HRUSKA and PETER LAMMER
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Appeal No. 1997-2158
Application No. 08/234,239
——————————

HEARD: February 8, 2000
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Before BARRETT, FLEMING, and BARRY, <u>Administrative Patent Judges</u>.

BARRY, <u>Administrative Patent Judge</u>.

<u>DECISION ON APPEAL</u>

This is a decision on the appeal under 35 U.S.C. § 134 from the final rejection of claims 1, 4-9, and 12-16. We reverse.

BACKGROUND

The invention at issue in this appeal relates to validity checking in a computer network. Validity checking examines data from a computer program to learn if unwanted instructions are present. Such checking may detect a computer virus before it is executed.

In a computer network, each workstation may include its own validity checking software. Upon boot-up, each workstation runs its software to check for instructions indicative of a virus. Such an arrangement occupies memory space in each workstation. Updating validity checking program files and data files is laborious, moreover, because each workstation must be updated.

The invention employs networked workstations and a server to conduct validity checking without the aforementioned memory capacity and updating problems. Specifically, one of the workstations copies a computer program that requires checking to the server. The server runs software to check for instructions indicative of a virus and reports the results of

the check to the workstation. Under this arrangement,

validity checking software need only be stored on the server.

Updating of validity checking program files and data files,

moreover, need only be done to the server.

     Claim 1, which is representative for our purposes,

follows:

     Claim 1. A method for checking the validity of
an item of data stored for access by a first data
processor of a data processing network comprising at
least two interconnected data processors, the method
comprising the steps of:

     storing for access by a second data processor a
plurality of definitions of forms of data indicative
of invalidity of items of data;

     causing the first data processor to provide the
second data processor with a copy of the item of
data;

     determining, using the second data processor,
whether any of the stored forms of data are present
in the item of data and declaring the item of data
invalid if any of the stored forms of data are
present in the item of data;

     reporting to the first data processor on the
validity of the item of data; and

     causing the first data processor to prevent
access to the item of data if the item of data is
declared as invalid.

The references relied on in rejecting the claims follow:

Francisco   4,845,715   Jul. 4, 1989

Griswold et al.   WO#93/01550   Jan. 21,
1993.
 (Griswold)

(Published PCT Application)

Claims 1, 4-9, and 12-16 stand rejected under 35 U.S.C.

§ 103 as obvious over Francisco in view of Griswold. Rather

than repeat the arguments of the appellants or examiner in

toto, we refer the reader to the briefs and answers for the

respective details thereof.

OPINION

In reaching our decision in this appeal, we considered

the subject matter on appeal and the rejection advanced by

the examiner. Furthermore, we duly considered the arguments

and evidence of the appellants and examiner. After

considering the totality of the record, we are persuaded that

the examiner erred in rejecting claims 1, 4-9, and 12-16.

Accordingly, we reverse.

We begin by noting the following principles from <u>In re</u>

<u>Rijckaert</u>, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir.

1993).

> In rejecting claims under 35 U.S.C. Section 103,
> the examiner bears the initial burden of presenting
> a <u>prima facie</u> case of obviousness. <u>In re Oetiker</u>,
> 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir.
> 1992). Only if that burden is met, does the burden
> of coming forward with evidence or argument shift
> to the applicant. <u>Id.</u> "A <u>prima facie</u> case of
> obviousness is established when the teachings from
> the prior art itself would appear to have suggested
> the claimed subject matter to a person of ordinary
> skill in the art." <u>In re Bell</u>, 991 F.2d 781, 782,
> 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting <u>In re</u>
> <u>Rinehart</u>, 531 F.2d 1048, 1051, 189 USPQ 143, 147
> (CCPA 1976)). If the examiner fails to establish a
> <u>prima facie</u> case, the rejection is improper and will
> be overturned. <u>In re Fine</u>, 837 F.2d 1071, 1074, 5
> USPQ2d 1596, 1598 (Fed. Cir. 1988).

With these in mind, we analyze the appellants' arguments.

> The appellants' argument follows.

> Virus instructions, such as "Jump" instructions,
> page 7, line 15 et seq., are exemplary forms of data
> indicative of invalidity that can appear <u>within</u>
> multiple unrelated programs and data files, and bear
> no relationship to Francisco's unique EIDs that are
> separate from and uniquely associated with a single
> program. For this reason, the Examiner's
> interpretation of the claimed "forms of data
> indicative of invalidity" is also expressly contrary
> to the definition provided in the instant

specification. (Reply Br. Addressing Supp.
Examiner's Answer at 4.)

The examiner replies, "The determination of the electronic

indicia is a determination of what is 'in' the program. The

comparison of the indicia indicates a form of data that is

invalid." (Supplemental Examiner's Answer at 2.) We agree

with the appellants.

    "Claims are not interpreted in a vacuum, but are part of

and are read in light of the specification." Slimfold Mfg.

Co. v. Kinkead Indus., Inc., 810 F.2d 1113, 1116, 1 USPQ2d

1563, 1566 (Fed. Cir. 1987) (citing Hybritech Inc. v.

Monoclonal Anti-bodies, Inc., 802 F.2d 1367, 1385, 231 USPQ

81, 94-95 (Fed. Cir. 1986); In re Mattison, 509 F.2d 563, 565,

184 USPQ 484, 486 (CCPA 1975)). Here, claims 1 and 4-8 each

specifies in pertinent part the following limitations:

        storing for access ... a plurality of
    definitions of forms of data indicative of
    invalidity of items of data;
        ...
        determining ... whether any of the stored forms
    of data are present in the item of data and
    declaring the item of data invalid if any of the
    stored forms of data are present in the item of data
    ....

Similarly, claims 9 and 12-16 each specifies in pertinent part

the following limitations:

        storage means ... for storing a set of
    information defining data of a plurality of
    characteristic forms that are indicative of
    invalidity;

        means ... for testing for the presence of data
    of any of the characteristic forms, in the item of
    data, and generating a validity signal indicative of
    whether data of any of the characteristic forms has
    been detected in the item of data ....

The appellants' specification defines the limitations as

follows.

    Information defining the characteristic forms of
    data indicative of the file's validity or invalidity
    is stored at the file server. These characteristic
    forms may indicate whether the file contains
    unwanted data, such as a virus, or whether it has
    been authorized for or barred from use. For a
    virus, for example, the characteristics may indicate
    the form of data characteristic of the virus such as
    instructions found at the start of the file
    (typically "jump" instructions) or elsewhere in the
    file, which for some viruses may appear in any
    sequence. (Spec. at 7-8.)

Reading the claims in light of the specification, we interpret

the limitations as reciting the testing of a computer program

or file for the presence of instructions that are

characteristic of a computer virus such as jump instructions.

The examiner fails to show a teaching or suggestion of
the limitations in the prior art. Francisco's electronic
indicia, on which the examiner relies, are not instructions at
all. Each electronic index is a numeral that is "uniquely
characteristic of the total number of binary 1's and binary
0's of a software program ...." Francisco, abs., ll. 4-5.
Moreover, the indicia do not indicate the invalidity of data.
The examiner admits, "Francisco does not store forms of data
which are indicative of invalidity of data." (Final Rejection
at 2.) Rather than indicating the invalidity of data, the
electronic indicia "uniquely and selectively identif[y] the
submitted program." Col. 2, ll. 28-29.

Furthermore, the reference does not test a computer
program or file for the presence of the electronic indicia let
alone for the presence of instructions that are characteristic
of a computer virus. The examiner admits that Francisco
instead performs "comparison of the indicia ...."
(Supplemental Examiner's Answer at 2.) More specifically,
Francisco compares "first and second electronic identification

indicia 12 and 34 for the selected Program S ...." Col. 3,

ll. 1-9. Griswold does not cure the defects of Francisco.

For the foregoing reasons, we are not persuaded that the

prior art would have suggested the limitation of testing a

computer program or file for the presence of instructions that

are characteristic of a computer virus such as jump

instructions as claimed. The examiner has not established a

<u>prima facie</u> case of obviousness. Therefore, we reverse the

rejection of claims 1, 4-9, and 12-16 under 35 U.S.C. § 103.

<u>CONCLUSION</u>

To summarize, the examiner's rejection of claims 1, 4-9,

and 12-16 under 35 U.S.C. § 103 is reversed.

REVERSED

LEE E. BARRETT   )
Administrative Patent Judge   )
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)
)
) BOARD OF PATENT
MICHAEL R. FLEMING   )   APPEALS
Administrative Patent Judge   )   AND
) INTERFERENCES
)
)
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LANCE LEONARD BARRY   )
Administrative Patent Judge   )

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